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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/731,535	12/06/2000	Jerome Collin	51005.P200	2069

24197 7590 11/10/2003  
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EXAMINER

THOMPSON, ANNETTE M

ART UNIT PAPER NUMBER

2825

DATE MAILED: 11/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/731,535

Applicant(s)

JEROME COLLIN ET AL.

Examiner

A. M. Thompson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 August 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-8, 16, 19, 21-23, 31-34, 37, 38 and 42 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 9-15, 17, 18, 20, 24-30, 35, 36, 39-41 and 43 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

Applicants' Amendment to 09/731,535 has been examined. The specification is amended. Claims 2, 3, 5, 17, 18, and 20 are amended. Claims 32-43 are added. Claims 1-43 are pending.

### *Claim Objections*

1. **Claims 9-15, 17, 18, 20, 24-30, 35, 36, 39, 40, 41, and 43**, are objected to because of the following informalities: Pursuant to **claim 36**, before "HDL", insert - - generic- -. Pursuant to **claims 9, 39, 40, and 24**, Applicants must clearly denote that output state transitions is represented by (QQ+) only and then disclose that the output state transitions comprises (00,01,etc.), e.g. wherein the output state transitions comprise. . .; additionally Applicants must clearly denote that the sets of states comprise the contents of the parenthetical information. Pursuant to **claims 10 and 25**, Applicants must state what "N" represents. Pursuant to **claims 12-15 and 27-30**, Applicants must define in the claim or prior base claim what "do not care" means, i.e. it is a state. Pursuant to **claim 14**, delete the extra spacing between line 5 and 6. Pursuant to **claim 30**, Applicants must define within the claim or a prior base claim what the acronym meaning; additionally, "the connectivity matrix" lacks sufficient antecedent basis. Pursuant to **claim 35**, Applicants must define in the claim or a prior base claim the acronym (QQ+), e.g. output state transition (QQ+). Pursuant to **claim 43**, in order to provide structural/functional connection, Applicants must first claim that the circuit element has reachable states before claiming the next reachable state. Pursuant to **claim 17**, at line 1, before "stored", insert - -having---. Pursuant to **claim 18**, at line 1,

before "stored", insert - -having--. Pursuant to **claim 20**, at line 1, before "stored", insert - -having--; additionally, at line 11, after "matrix", insert using appropriate indentation - - comprises: performing a reachability analysis on the conversion matrix- -. Pursuant to **claim 41**, the second compressed format" lacks sufficient antecedent basis; additionally claim 41 references "data structures" which connotes more than one data structure, however claim 41's base claim references a singular data structure. Claims dependent from objected to based claims are likewise objected to.

Appropriate correction is required.

***Allowable Subject Matter***

2. Claims 1-8, 16, 19, 21-23, 31-34, 37, 38, and 42 are allowed over the prior art of record.

***Remarks***

3. Applicants' amendment overcomes or obviates many of the outstanding rejections/objections. However, the amendment with the addition of newly added claims simultaneously introduces new objections, outlined, supra.

***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to A.M. Thompson whose telephone number is (703) 305-7441. The Examiner can usually be reached Monday thru Friday from 8:00 a.m. to 5:00 p.m.. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Matthew S. Smith, can be reached on (703) 308-1323.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956 or the Customer Service Center whose telephone number is (703) 306-3329.

6. Responses to this action should be mailed to:

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

or faxed to:

(703) 872-9306, (for all **OFFICIAL** communications intended for entry)

Hand-delivered responses should be brought to Crystal Plaza 4, 2021 South Clark Place, Arlington, VA., Fourth Floor (Receptionist).



A. M. THOMPSON  
Master's Level Patent Examiner